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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/202,500	03/24/1999	ANDREW BICKFORD HAYNS	HAYNS-1	2980

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EXAMINER

CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/202,500

Applicant(s)

HAYNS, ANDREW BICKFORD

Examiner

Ivars C. Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-23 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-23 and 30-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-23 and 30-33 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand et al. in view of German Patent No. DE 2358808. As pointed out in the previous Office Action, Wiegand et al. discloses an oil sorbing material which comprises a non-woven sheet-like matrix, which matrix contains cellulose fibers, such as cotton (col. 2, line 4). This reference also discloses that the cellulose fibers can be treated with a sizing agent (col. 2, lines 7-8); further discloses that the matrix has a density within the recited range (col. 3, line 59); and still further discloses that this matrix can contain a foam material (col. 2, line 62). Accordingly, this primary reference discloses the claimed invention with the exception of the particular sizing material employed, the type of foam (i.e. open-cell) material employed (claim 22), and the thickness of the matrix (claim 32). German Patent No. DE 2358808 discloses modifying a similar cellulosic oil sorbent material with a high molecular weight (i.e. having a minimum of 14 carbon atoms) fatty acid, in order to enhance the oil removal properties of the cellulosic material; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the higher molecular weight fatty acid treatment of the secondary reference for the paraffin treatment of the primary reference, in order to obtain the advantages disclosed by this secondary reference for the product of the primary reference. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ an open-cell foam as the foam material called for in the primary reference (see col. 2, line 62), in order to

increase the porosity, and thereby the adsorption capability, of the modified primary reference material. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a matrix having the thickness recited in claim 32 in the material of the modified primary reference material, in order to facilitate handling of this modified primary reference material.

Applicant's arguments filed October 16, 2003 have been noted and carefully considered, but are not deemed to be persuasive of patentability. Applicant argues that neither Wiegand nor Holst (i.e. the German patent) disclose or relate to a filter. It is again pointed out, however, that the term "filter" merely requires a material that is capable of performing a filtering function. The web or mat-like structure of the Wiegand material (see col. 1, lines 41-42) is clearly sufficiently porous to permit a fluid to pass therethrough, while retaining any relatively large particles contained in this fluid; and therefore, this material is inherently capable of being used as a filter, if so desired. It is well settled that a claim to a product is not limited to the manner in which the product is intended to be employed. See *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963); and *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Applicant also argues that the claims call for a material having two components, namely (1) a sheet-like matrix and (2) the material which is incorporated within the matrix; and further argues that Wiegand only has a "mat-like structure," and that neither Wiegand nor Holst provides a structure which includes both a sheet-like matrix and a material comprising a base formed substantially of surface modified cellulose fibers. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that a "mat-like structure" formed from a modified cellulosic material of the type recited is

deemed to satisfy the limitation of "sheet-like matrix in which is incorporated ..." since this language does require the presence of two separate elements. In other words, a matrix which is made from modified cellulosic fibers clearly has these fibers incorporated therein.

Applicant also argues that Holst is directed to small particles of cellulose, and does not suggest a coherent body as claimed. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the German patent is relied upon only for its teaching of modifying a cellulosic oil sorbent material with a high molecular weight (i.e. having a minimum of 14 carbon atoms) fatty acid, in order to enhance its oil sorbing capability, not for a teaching of a coherent body (i.e. sheet-like matrix). The use of a sheet-like matrix is clearly provided by the disclosure of the primary reference (i.e. Wiegand).

Applicant also argues that Holst discloses five types of modifying agents, and that no functional advantage is seen to be mentioned for high molecular weight fatty acids. Once again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the German patent clearly discloses that prior cellulosic oil sorbent materials which have been made hydrophobic with agents such as paraffin (see page 4, line 3, of Applicant's translation of this document) do not retain oil adequately (page 4, line 5). This German patent then states that the solution to the problem of producing an improved oil sorbent material can be achieved by modifying these known cellulosic materials with "an organic isocyanate, a high molecular fatty acid, an ester of a high molecular fatty acid, a complex compound of a high molecular fatty acid with basic chromium chloride or a melamine resin precondensate having a high molecular fatty acid group" (see page 4, lines 15-22). Accordingly,

given this teaching by the German patent, one of ordinary skill in the fluid purification art would have been motivated to substitute any of the modifying agents disclosed in this secondary reference, including high molecular fatty acid, for the paraffin treating agent in the primary reference in order to obtain the advantages disclosed by this secondary reference for the product of the primary reference.

Applicant also points out that the only carboxylic acid shown in the examples is docosanoic acid, which does not have a hydrocarbon chain consisting of 8-20 carbon atoms. Once again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the "examples" are merely that, i.e. exemplary of treating agents which can be used in producing the disclosed product. They are not, however, intended to limit the treating agents which can be used. The German patent clearly discloses (see page 5, line 12) that fatty acids with "at least 14 carbon atoms in the molecule" can be used to produce the reference material. Accordingly, one of ordinary skill in the art would have been motivated to employ fatty acids with at least 14 carbon atoms in their molecule (e.g. stearic acid and palmitic acid) in the modification proposed above, as required by the claims of this application.

Applicant also challenges that examiner's assertion that the material of Wiegand can inherently function as a filter, and points out that in rejections based on inherency, the inherency must be reasonably certain or inevitable. It is again pointed out that the web or mat-like material of Wiegand is clearly porous, and is therefore clearly capable of allowing a fluid, liquid or gas, to pass therethrough. Furthermore if the liquid or gas passing through this web or mat were to contain particulate matter which is larger than the openings between the fibers in this web or

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mat, then this particulate matter would become trapped on the upstream side of this web or mat; this is a certainty. Accordingly, the web or mat of Wiegand is inherently capable of functioning as a filter.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0987.



Ivars C. Cintins  
Primary Examiner  
Art Unit 1724

I. Cintins  
January 10, 2004